

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Jeff EDER

Serial No.: 11/094,171

Filed: March 31, 2005

For: A Personalized Medicine Service

Group Art Unit: 3693

Examiner: Kim, Chong Hwa

**Brief on Appeal**

Commissioner of Patents

Washington, D.C. 20321

Sir or Madam:

The Appellant respectfully appeals the rejection of claim 24, claim 25, claim 26, claim 27 and claim 28 in the November 19, 2007 Office Action for the above referenced application.

### **1. Real party in interest**

Asset Reliance, Inc. (dba Asset Trust, Inc.) is the assignee of 100% interest in the above referenced patent application.

### **2. Related appeals**

An appeal for U.S. Patent Application 10/717,026 filed November 19, 2003 may be affected by or have a bearing on this appeal.

### **3. Status of Claims**

Claim 24, claim 25, claim 26, claim 27 and claim 28 are rejected for allegedly being indefinite under 35 USC 112 second paragraph and are the subject of this appeal. Claims 1 – 13, 22 and 23 are allowed. Claims 14 - 21 were previously cancelled without prejudice.

### **4. Status of Amendments**

An Amendment/Reply After Final Rejection with an amendment to claim 24 was submitted on January 17, 2008. In an advisory action dated February 11, 2008 the Examiner indicated that he would not accept the Amendment.

### **5. Summary of Claimed Subject Matter**

One embodiment of a personalized medicine service according to the present invention is best depicted in Figures 1 – 16 of the specification for the instant application. Figure 1 gives an overview of the three major processing steps which include defining a subject entity, developing a storing a complete context for a health of the subject entity in a Contextbase (50) and using the complete context for the health of the subject to provide personalized medical services for the subject entity. Claim 24, claim 25, claim 26, claim 27 and claim 28 relate to providing one of the personalized medicine services – completing a search for data, information and/or knowledge that is relevant to the complete context for the health of the subject entity. The support in the specification for each claim is summarized below (in parentheses). Because claim 24 relies on claim 8, the relevant portion of claim 8 is also shown below.

Relevant portion of claim 8:

defining a subject using at least a portion of said data and a plurality of user input (reference numbers 202, 203 from FIG 6A and line 23, page 55 through line 2, page 58), and analyzing at least a portion of said data as required to define a complete context for a health of said subject ( FIG. 7A, 7B, 7C, 7D, 7E, 7F, 7G and 7H and line 1, page 77 through line 35, page 109)

24. A computer program product embodied on a computer readable medium and comprising program code for directing at least one computer to perform the steps in a biological context search method, comprising:

- (a) preparing data from a plurality of systems with information related to a health of one or more subjects for use in processing,
- (b) identifying data, information and knowledge that are relevant to the complete context for the health of a subject from claim 8, and
- (c) presenting at least one of relevant data, relevant information or relevant knowledge after said data, information and knowledge are sorted on the basis of relevancy to the complete context of the health of said subject (reference number 204, FIG. 6A, FIG. 10 and line 3, page 58 through line 27, page 60; line 23 through 26, page 35; and line 5, page 38 through line 19, page 40 of the specification).

25. The computer program product claim 24, wherein a subject is a patient, two or more patients or a patient-entity system (FIG 2A, 2B and 2C, line 32, page 6 through line 3, page 33).

26. The computer program product claim 24, wherein at least one of relevant data, relevant information or relevant knowledge are presented in order of relevancy in response to a query or in response to an identified change in the complete context of the health of a subject (line 23 – 26, page 35, line 5, page 38 through line 19, page 40 of the specification).

27. The computer program product of claim 24, wherein the computer readable medium further comprises a plurality of intelligent agents (line 15 through 20, page 21).

28. The computer program product of claim 24, wherein the complete context for the health of a subject further comprises a measure context, a transaction context and one or more aspects of context selected from the group consisting of resource context, factor context, element context, reference context, relationship context, lexical context, temporal context and combinations thereof (line 25, page 12, through line 8, page 15, and line 3, page 22 through line 5, page 24 of the specification).

## **6. Grounds of rejection to be reviewed on appeal**

**Issue 1 – Whether claim 24, claim 25, claim 26, claim 27 and/or claim 28 are indefinite under 35 USC 112 second paragraph.**

## 7. The Argument

For each ground of rejection which Appellant contests herein which applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand and fall together.

### **Issue 1 – Whether claim 24, claim 25, claim 26, claim 27 and/or claim 28 are indefinite under 35 USC 112 second paragraph?**

The Assignee will respectfully traverse the §112 second paragraph rejections of each claim in two ways. First, by noting that the Office Action has failed to establish a prima facie case that the claims do not meet the requirements of §112 second paragraph. Second, by noting that the claim rejections based on assertions of alleged indefiniteness are not in compliance with the Administrative Procedures Act and are therefore moot.

The first way the Assignee will traverse the 35 U.S.C. §112 second paragraph rejection of claim 24, claim 25, claim 26, claim 27 and/or claim 28 will be by noting that the arguments presented by the Examiner fail to establish the prima facie case required to sustain a §112 second paragraph rejection. *MPEP 2173.02 states that: definiteness of claim language must be analyzed, not in a vacuum, but in light of:*

- (A) The content of the particular application disclosure;*
- (B) The teachings of the prior art; and*
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.*

*In reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent. See, e.g., Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). See also In re Larsen, No. 01-1092 (Fed. Cir. May 9, 2001). In the case of claim 24, claim 25, claim 26, claim 27 and/or claim 28 the Examiner has failed to establish the prima facie case that the specification does not meet the requirements of §112 second paragraph in four ways for every rejected claim. The four ways are:*

1. By failing to interpret the claims in light of the specification.

Claim 24: the specification clearly identifies the meaning of the term "complete context"

*("it is a shorthand way of noting that all eight types of context layers have been defined for a subject function", line 4 – 7, page 20 of the specification).* A complete context for the health of a subject is therefore the eight layers of context (element, resource, environment, relationship, measure, reference frame, transaction and lexicon layers of context,) for a health function for a subject. As discussed under claim 28 (below), each layer of context is also defined in the specification. The specification also gives examples of health functions including maintaining body temperature at 98.6 degrees and destroying cancer cells (line 3 – 6, page 16 of the specification). Identifying and presenting data, information or knowledge that is relevant (a well known term) to the complete context is also explained in the specification as the definition of data, information (data with context of unknown completeness) and knowledge (data with complete context) are provided (line 27, page 16 through line 2, page 17).

Claim 25: The meaning of each term is clear from the prior art and a review of: FIG 2A, 2B and 2C and line 32, page 6 through line 3, page 33 of the specification.

Claim 26: The meaning of most terms are well known to those of average skill in the art. Support and additional details can be found in lines 23 through 26 of page 35, line 5, page 38 through line 19, page 40 of the specification.

Claim 27: The meaning of intelligent agent (or bot) is well known to those of average skill in the art. The ability to use intelligent agents or bots is described in a variety of places including lines 15 – 20 of page 21.

Claim 28: Each layer of context is defined and described in the specification (line 25, page 12, through line 8, page 15, and line 3, page 22 through line 5, page 24 of the specification).

2. Claims 24 – 28: By failing to provide any evidence that someone of average skill in the relevant arts would have difficulty interpreting the claims. The meaning of many of the terms such as "relevant", intelligent agent and patient are described in the prior art and are well known to those of average skill in the art. The other terms are specifically described in the specification as detailed above under item 1 above.

3. Claims 24 – 28: By failing to establish that the limitation(s) in the claims fail to describe the invention. The Examiner has not presented any information that anyone of average skill in the art would be confused by the scope of any of the rejected claims.

4. Claims 24 – 28: By failing to consider the claims as a whole. Taken as a whole the claims

describe an article of manufacture for completing a search and returning results tied to a specific situation for a patient (as defined by a complete context for a subject's health) as shown in an illustrative example below.

Patient #1	Patient #2
Health function: maintain blood glucose levels between 90 mg/dL to 130 mg/dL	Health function: maintain blood glucose levels between 90 mg/dL to 130 mg/dL
Element context: Patient has a broadband internet connection, several computers, a car available for use and has several credit cards. Patient has a SNP on the Calpain-10 gene that pre-disposes the patient to type II Diabetes (T2D).	Element context: Patient uses a Medi-Jector VISION Needle Free Device to inject insulin, has an i-Phone with a wireless plan, a car available for use and has several credit cards. Patient has a SNP on the Calpain-10 gene that pre-disposes the patient to type II Diabetes.
Resource context: patient has 3 week supply of glucose vials and over a dozen new needles and syringes available for use	Resource context: patient no glucose vials or needle free syringes available for use
Environment context: Weather is sunny and warm	Environment context: blizzard like conditions in general vicinity
Relationship: Patient receives syringes, needles and glucose from hmo	Relationship: Patient receives, needle free syringes and glucose from hmo
Measure context: Blood glucose is currently 110 mg/dL	Measure: Blood glucose is currently 80 mg/dL
Reference frame 1 context: patient is at home; Reference frame 2: patient is 3 miles from nearest facility in hmo network	Reference frame 1: patient is 1,500 miles from home; Reference frame 2: patient is over 100 miles from nearest facility in hmo network
Transaction context: the patient's hmo has just signed an agreement to test an experimental gene therapy for the SNP on the Calpain-10 gene that the patient has	Transaction context: When out of hmo network area, patient uses credit cards to purchase medical services and supplies
Lexicon: Patient refers to insulin as Humalog®	Lexicon: Patient refers to insulin as sugar
Search term: "Humalog®" returns results related to glucose vials, syringes, needles and the experimental gene therapy treatment available under the NIH – hmo agreement	Search term: "sugar" returns results related to glucose vials, needle free syringes from sources physically located close to the patient that accept one of the credit cards the patient owns.

As noted previously, the second way the Assignee will respectfully traverse the §112 second paragraph rejections of claim 24, claim 25, claim 26, claim 27 and/or claim 28 is by noting that the assertions regarding the alleged indefiniteness of the claims are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot. In *Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of USPTO findings are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. The Assignee respectfully submits that discussion in the preceding paragraphs clearly shows that the Examiner has failed to provide even a scintilla of evidence to support the allegation that the claims do not meet the requirements of §112 second paragraph and that as a result has failed to meet the substantial evidence standard. The Assignee respectfully submits that the 19 November 2007 Office Action also fails to pass the arbitrary and capricious test because the Examiner has issued a notice of allowance for claims that rely on many of the same "allegedly indefinite" terms used in the rejected claims. The Assignee notes that there are still other ways in which these rejections can be shown to be arbitrary and capricious.

## **8. Conclusion**

For the reasons detailed above, the Appellant respectfully but forcefully contends that each claim is patentable. Therefore, reversal of all rejections is courteously solicited.

Respectfully submitted,  
Asset Trust, Inc.

/B.J. Bennett/

B.J. Bennett, President  
Dated: March 1, 2008

## **9. Claims Appendix**

24. A computer program product embodied on a computer readable medium and comprising program code for directing at least one computer to perform the steps in a biological context search method, comprising:

- (a) preparing data from a plurality of systems with information related to a health of one or more subjects for use in processing,
- (b) identifying data, information and knowledge that are relevant to the complete context for the health of a subject from claim 8, and
- (c) presenting at least one of relevant data, relevant information or relevant knowledge after said data, information and knowledge are sorted on the basis of relevancy to the complete context of the health of said subject.

25. The computer program product claim 24, wherein a subject is a patient, two or more patients or a patient-entity system.

26. The computer program product claim 24, wherein at least one of relevant data, relevant information or relevant knowledge are presented in order of relevancy in response to a query or in response to an identified change in the complete context of the health of a subject.

27. The computer program product of claim 24, wherein the computer readable medium further comprises a plurality of intelligent agents.

28. The computer program product of claim 24, wherein the complete context for the health of a subject further comprises a measure context, a transaction context and one or more aspects of context selected from the group consisting of resource context, factor context, element context, reference context, relationship context, lexical context, temporal context and combinations thereof.

## **10. Evidence Appendix (None)**

## **11. Related Proceedings Appendix (None)**



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11/094,171	03/31/2005	Jeffrey Scott Eder	AR-80	8714
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ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021			KIM, CHONG HWA	
			ART UNIT	PAPER NUMBER
			3682	
			MAIL DATE	DELIVERY MODE
			11/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

11/094,171

Applicant(s)

EDER, JEFFREY SCOTT

Examiner

Chong H. Kim

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13, 22 and 23 is/are allowed.
- 6) ☒ Claim(s) 24-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/8/07; 8/25/07; 11/6/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 24-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 recites the limitation "identifying data, information and knowledge that are relevant to the complete context for the health of a subject from claim 8" in lines 6-7. It is not clear what exactly entails "the complete context for the health of a subject" in claim 8. There is no clear delineation of the metes and bounds of the claimed subject matter.

### *Allowable Subject Matter*

3. Claims 1-13, 22, and 23 are allowed.

### *Conclusion*

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

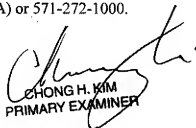
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (571) 272-7108. The examiner can normally be reached on Monday - Friday; 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chk  
November 13, 2007

  
CHONG H. KIM  
PRIMARY EXAMINER